

Liang Wang

List of Publications by Year in descending order

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96
papers

10,805
citations

44069

48
h-index

39675

94
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96
all docs

96
docs citations

96
times ranked

14229
citing authors

#	ARTICLE	IF	CITATIONS
1	Exploration of the active center structure of nitrogen-doped graphene-based catalysts for oxygen reduction reaction. <i>Energy and Environmental Science</i> , 2012, 5, 7936.	30.8	2,089
2	Economical Pt-Free Catalysts for Counter Electrodes of Dye-Sensitized Solar Cells. <i>Journal of the American Chemical Society</i> , 2012, 134, 3419-3428.	13.7	798
3	Gram-scale synthesis of single-crystalline graphene quantum dots with superior optical properties. <i>Nature Communications</i> , 2014, 5, 5357.	12.8	750
4	Direct Synthesis of Spatially-Controlled Pt-on-Pd Bimetallic Nanodendrites with Superior Electrocatalytic Activity. <i>Journal of the American Chemical Society</i> , 2011, 133, 9674-9677.	13.7	513
5	Ultrathin graphene oxide encapsulated in uniform MIL-88A(Fe) for enhanced visible light-driven photodegradation of RhB. <i>Applied Catalysis B: Environmental</i> , 2018, 221, 119-128.	20.2	366
6	Full-color fluorescent carbon quantum dots. <i>Science Advances</i> , 2020, 6, .	10.3	344
7	PPy-encapsulated SnS ₂ Nanosheets Stabilized by Defects on a TiO ₂ Support as a Durable Anode Material for Lithium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 811-815.	13.8	261
8	Strategic Synthesis of Trimetallic Au@Pd@Pt Core-Shell Nanoparticles from Poly(vinylpyrrolidone)-Based Aqueous Solution toward Highly Active Electrocatalysts. <i>Chemistry of Materials</i> , 2011, 23, 2457-2465.	6.7	259
9	Efficient Separation of Electron-Hole Pairs in Graphene Quantum Dots by TiO ₂ Heterojunctions for Dye Degradation. <i>ACS Sustainable Chemistry and Engineering</i> , 2015, 3, 2405-2413.	6.7	244
10	Graphene quantum dots modified mesoporous graphite carbon nitride with significant enhancement of photocatalytic activity. <i>Applied Catalysis B: Environmental</i> , 2017, 207, 429-437.	20.2	238
11	Metallic 1T MoS ₂ nanosheet arrays vertically grown on activated carbon fiber cloth for enhanced Li-ion storage performance. <i>Journal of Materials Chemistry A</i> , 2017, 5, 14061-14069.	10.3	232
12	High-Lithium-Affinity Chemically Exfoliated 2D Covalent Organic Frameworks. <i>Advanced Materials</i> , 2019, 31, e1901640.	21.0	217
13	Facile synthesis of fluorescent graphene quantum dots from coffee grounds for bioimaging and sensing. <i>Chemical Engineering Journal</i> , 2016, 300, 75-82.	12.7	208
14	NIR-responsive carbon dots for efficient photothermal cancer therapy at low power densities. <i>Carbon</i> , 2018, 134, 153-162.	10.3	175
15	Self-gating in semiconductor electrocatalysis. <i>Nature Materials</i> , 2019, 18, 1098-1104.	27.5	167
16	Engineering grain boundaries at the 2D limit for the hydrogen evolution reaction. <i>Nature Communications</i> , 2020, 11, 57.	12.8	153
17	Machine-Learning-Driven Synthesis of Carbon Dots with Enhanced Quantum Yields. <i>ACS Nano</i> , 2020, 14, 14761-14768.	14.6	143
18	Photocatalytic Applications of Two-Dimensional Ti ₃ C ₂ MXenes: A Review. <i>ACS Applied Nano Materials</i> , 2020, 3, 9581-9603.	5.0	142

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19	Rapid and Efficient Synthesis of Platinum Nanodendrites with High Surface Area by Chemical Reduction with Formic Acid. <i>Chemistry of Materials</i> , 2010, 22, 2835-2841.	6.7	139
20	A solvent-engineered molecule fusion strategy for rational synthesis of carbon quantum dots with multicolor bandgap fluorescence. <i>Carbon</i> , 2018, 130, 153-163.	10.3	132
21	Electrophoretic fabrication of highly robust, efficient, and benign heterojunction photoelectrocatalysts based on graphene-quantum-dot sensitized TiO ₂ nanotube arrays. <i>Journal of Materials Chemistry A</i> , 2013, 1, 3551.	10.3	120
22	Scalable synthesis of organic-soluble carbon quantum dots: superior optical properties in solvents, solids, and LEDs. <i>Nanoscale</i> , 2017, 9, 13195-13202.	5.6	117
23	Hierarchical 3D All-Carbon Composite Structure Modified with N-Doped Graphene Quantum Dots for High-Performance Flexible Supercapacitors. <i>Small</i> , 2018, 14, e1801498.	10.0	105
24	Nitrogen and oxygen co-doped graphene quantum dots with high capacitance performance for micro-supercapacitors. <i>Carbon</i> , 2018, 139, 67-75.	10.3	98
25	Rationally Designed Efficient Dual-Mode Colorimetric/Fluorescence Sensor Based on Carbon Dots for Detection of pH and Cu ²⁺ Ions. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 12668-12674.	6.7	96
26	Sustainable Synthesis of Bright Green Fluorescent Nitrogen-Doped Carbon Quantum Dots from Alkali Lignin. <i>ChemSusChem</i> , 2019, 12, 4202-4210.	6.8	92
27	On the Role of Ascorbic Acid in the Synthesis of Single-Crystal Hyperbranched Platinum Nanostructures. <i>Crystal Growth and Design</i> , 2010, 10, 3454-3460.	3.0	89
28	Efficient photocatalytic degradation of ibuprofen in aqueous solution using novel visible-light responsive graphene quantum dot/AgVO ₃ nanoribbons. <i>Journal of Hazardous Materials</i> , 2016, 312, 298-306.	12.4	89
29	Regulation of functional groups on graphene quantum dots directs selective CO ₂ to CH ₄ conversion. <i>Nature Communications</i> , 2021, 12, 5265.	12.8	89
30	A Facile "Double-Catalysts" Approach to Directionally Fabricate Pyridinic N ₂ -B-Pair-Doped Crystal Graphene Nanoribbons/Amorphous Carbon Hybrid Electrocatalysts for Efficient Oxygen Reduction Reaction. <i>Advanced Materials</i> , 2022, 34, e2107040.	21.0	88
31	Simulated solar driven catalytic degradation of psychiatric drug carbamazepine with binary BiVO ₄ heterostructures sensitized by graphene quantum dots. <i>Applied Catalysis B: Environmental</i> , 2017, 205, 587-596.	20.2	87
32	Room-temperature synthesis of graphene quantum dots via electron-beam irradiation and their application in cell imaging. <i>Chemical Engineering Journal</i> , 2017, 309, 374-380.	12.7	81
33	Three Minute Ultrarapid Microwave-Assisted Synthesis of Bright Fluorescent Graphene Quantum Dots for Live Cell Staining and White LEDs. <i>ACS Applied Nano Materials</i> , 2018, 1, 1623-1630.	5.0	81
34	Assembling nitrogen and oxygen co-doped graphene quantum dots onto hierarchical carbon networks for all-solid-state flexible supercapacitors. <i>Electrochimica Acta</i> , 2017, 235, 561-569.	5.2	78
35	Boosting the energy storage densities of supercapacitors by incorporating N-doped graphene quantum dots into cubic porous carbon. <i>Nanoscale</i> , 2018, 10, 22871-22883.	5.6	78
36	Carboxylated carbon quantum dot-induced binary metal-organic framework nanosheet synthesis to boost the electrocatalytic performance. <i>Materials Today</i> , 2022, 54, 42-51.	14.2	76

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37	C-axis preferentially oriented and fully activated TiO ₂ nanotube arrays for lithium ion batteries and supercapacitors. <i>Journal of Materials Chemistry A</i> , 2014, 2, 11454-11464.	10.3	75
38	Boosting ORR Electrocatalytic Performance of Metal-Free Mesoporous Biomass Carbon by Synergism of Huge Specific Surface Area and Ultrahigh Pyridinic Nitrogen Doping. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 13807-13812.	6.7	74
39	Nearly monodisperse graphene quantum dots fabricated by amine-assisted cutting and ultrafiltration. <i>Nanoscale</i> , 2013, 5, 12098.	5.6	73
40	Synthesis of Mesoporous Pt Nanoparticles with Uniform Particle Size from Aqueous Surfactant Solutions toward Highly Active Electrocatalysts. <i>Chemistry - A European Journal</i> , 2011, 17, 8810-8815.	3.3	70
41	Industrial production of ultra-stable sulfonated graphene quantum dots for Golgi apparatus imaging. <i>Journal of Materials Chemistry B</i> , 2017, 5, 5355-5361.	5.8	68
42	Role of Pyridinic-N for Nitrogen-doped graphene quantum dots in oxygen reaction reduction. <i>Journal of Colloid and Interface Science</i> , 2017, 508, 154-158.	9.4	61
43	Amine-enriched Graphene Quantum Dots for High-pseudocapacitance Supercapacitors. <i>Electrochimica Acta</i> , 2016, 208, 260-266.	5.2	60
44	Graphene-Encapsulated CuP ₂ : A Promising Anode Material with High Reversible Capacity and Superior Rate-Performance for Sodium-Ion Batteries. <i>Nano Letters</i> , 2019, 19, 2575-2582.	9.1	60
45	Amine-Functionalized Carbon Nanodot Electrocatalysts Converting Carbon Dioxide to Methane. <i>Advanced Materials</i> , 2022, 34, e2105690.	21.0	59
46	Hierarchical construction of high-performance all-carbon flexible fiber supercapacitors with graphene hydrogel and nitrogen-doped graphene quantum dots. <i>Carbon</i> , 2019, 154, 410-419.	10.3	58
47	Synthesis of graphene quantum dot/metal-organic framework nanocomposites as yellow phosphors for white light-emitting diodes. <i>New Journal of Chemistry</i> , 2018, 42, 5083-5089.	2.8	56
48	Carrier engineering of carbon nitride boosts visible-light photocatalytic hydrogen evolution. <i>Carbon</i> , 2021, 179, 80-88.	10.3	52
49	Seasonal and spatial distribution of 4-tert-octylphenol, 4-nonylphenol and bisphenol A in the Huangpu River and its tributaries, Shanghai, China. <i>Environmental Monitoring and Assessment</i> , 2013, 185, 3149-3161.	2.7	50
50	Enhanced photocatalytic activity of sulfur-doped graphene quantum dots decorated with TiO ₂ nanocomposites. <i>Materials Research Bulletin</i> , 2018, 97, 428-435.	5.2	49
51	Amphiphilic Graphene Quantum Dots as Self-Targeted Fluorescence Probes for Cell Nucleus Imaging. <i>Advanced Biology</i> , 2018, 2, 1700191.	3.0	47
52	Rational Design of Oxygen-Enriched Carbon Dots with Efficient Room-Temperature Phosphorescent Properties and High-Tech Security Protection Application. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 19918-19924.	6.7	47
53	White luminescent single-crystalline chlorinated graphene quantum dots. <i>Nanoscale Horizons</i> , 2020, 5, 928-933.	8.0	47
54	Ultrastable Amine, Sulfo Cofunctionalized Graphene Quantum Dots with High Two-Photon Fluorescence for Cellular Imaging. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 4711-4716.	6.7	45

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55	Facile Synthesis of Silver Bromide-Based Nanomaterials and Their Efficient and Rapid Selective Adsorption Mechanisms Toward Anionic Dyes. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 4617-4625.	6.7	44
56	Phase-transformed Mo ₄ P ₃ nanoparticles as efficient catalysts towards lithium polysulfide conversion for lithium-sulfur battery. <i>Electrochimica Acta</i> , 2020, 330, 135310.	5.2	44
57	Phosphorescence Tuning of Fluorine, Oxygen-Codoped Carbon Dots by Substrate Engineering. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 16262-16269.	6.7	38
58	Boron Nanosheet-Supported Rh Catalysts for Hydrogen Evolution: A New Territory for the Strong Metal-Support Interaction Effect. <i>Nano-Micro Letters</i> , 2021, 13, 138.	27.0	37
59	One-Pot Synthesis of Orange Emissive Carbon Quantum Dots for All-Type High Color Rendering Index White Light-Emitting Diodes. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 8289-8296.	6.7	37
60	Unravelling the Role of Strong Metal-Support Interactions in Boosting the Activity toward Hydrogen Evolution Reaction on Ir Nanoparticle/N-Doped Carbon Nanosheet Catalysts. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 22448-22456.	8.0	34
61	Boosting Visible-Light Photocatalytic Performance for CO ₂ Reduction via Hydroxylated Graphene Quantum Dots Sensitized MIL-101(Fe). <i>Advanced Materials Interfaces</i> , 2020, 7, 2000468.	3.7	33
62	Designing a sustainable fluorescent targeting probe for superselective nucleus imaging. <i>Carbon</i> , 2021, 180, 48-55.	10.3	31
63	Facile conversion of coal tar to orange fluorescent carbon quantum dots and their composite encapsulated by liposomes for bioimaging. <i>New Journal of Chemistry</i> , 2017, 41, 14444-14451.	2.8	30
64	Sorghum-Waste-Derived High-Surface Area KOH-Activated Porous Carbon for Highly Efficient Methylene Blue and Pb(II) Removal. <i>ACS Omega</i> , 2020, 5, 13548-13556.	3.5	29
65	PPy-encapsulated SnS ₂ Nanosheets Stabilized by Defects on a TiO ₂ Support as a Durable Anode Material for Lithium-Ion Batteries. <i>Angewandte Chemie</i> , 2019, 131, 821-825.	2.0	28
66	Yellow fluorescent graphene quantum dots as a phosphor for white tunable light-emitting diodes. <i>RSC Advances</i> , 2019, 9, 9301-9307.	3.6	27
67	Effect of thiophene S on the enhanced ORR electrocatalytic performance of sulfur-doped graphene quantum dot/reduced graphene oxide nanocomposites. <i>RSC Advances</i> , 2018, 8, 19635-19641.	3.6	25
68	Sustainable Synthesis of N-Doped Hollow Porous Carbon Spheres via a Spray-Drying Method for Lithium-Sulfur Storage with Ultralong Cycle Life. <i>Batteries and Supercaps</i> , 2020, 3, 1201-1208.	4.7	25
69	Electron beam induced degradation of clopyralid in aqueous solutions. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2011, 288, 759-764.	1.5	22
70	Graphene quantum dots assisted photovoltage and efficiency enhancement in CdSe quantum dot sensitized solar cells. <i>Journal of Energy Chemistry</i> , 2015, 24, 722-728.	12.9	22
71	High fluorescent sulfur regulating graphene quantum dots with tunable photoluminescence properties. <i>Journal of Colloid and Interface Science</i> , 2018, 529, 205-213.	9.4	22
72	Enhancing Defects of N-Doped Carbon Nanospheres Via Ultralow Co Atom Loading Engineering for a High-Efficiency Oxygen Reduction Reaction. <i>ACS Applied Energy Materials</i> , 2021, 4, 3439-3447.	5.1	18

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73	Binder-Free Graphene Organogels as Cost-Efficient Counter Electrodes for Dye-sensitized Solar Cells. <i>Electrochimica Acta</i> , 2016, 191, 946-953.	5.2	16
74	Efficient absorption of ibuprofen in aqueous solution using eco-friendly C ₃ N ₄ /soot composite. <i>Journal of Materials Science</i> , 2018, 53, 5929-5941.	3.7	16
75	Carbonated MOF-based graphene hydrogel for hierarchical all-carbon supercapacitors with ultra-high areal and volumetric energy density. <i>Journal of Electroanalytical Chemistry</i> , 2020, 876, 114489.	3.8	15
76	Direct thermal annealing synthesis of FeO nanodots anchored on N-doped carbon nanosheet for long-term electrocatalytic oxygen reduction. <i>Electrochimica Acta</i> , 2021, 398, 139361.	5.2	15
77	The Synergistic Effect of Pyridinic Nitrogen and Graphitic Nitrogen of Nitrogen-Doped Graphene Quantum Dots for Enhanced TiO ₂ Nanocomposites' Photocatalytic Performance. <i>Catalysts</i> , 2018, 8, 438.	3.5	13
78	Radical-induced destruction of diethyl phthalate in aqueous solution: kinetics, spectral properties, and degradation efficiencies studies. <i>Research on Chemical Intermediates</i> , 2013, 39, 3727-3737.	2.7	11
79	A universal strategy to separate hydrophilic hybrid-light carbon quantum dots using pure water as eluent. <i>Applied Materials Today</i> , 2020, 18, 100528.	4.3	10
80	Functional group tuning of two-dimensional carbon nanosheets for boosting oxygen reduction electrocatalysis. <i>Carbon</i> , 2021, 185, 395-403.	10.3	10
81	Graphene quantum dots modified Ag ₃ PO ₄ for facile synthesis and the enhanced photocatalytic performance. <i>Journal of the Chinese Advanced Materials Society</i> , 2018, 6, 255-269.	0.7	8
82	Revealing the effect of phosphorus doping on Co@carbon in boosting oxygen evolution catalytic activity. <i>Journal of Alloys and Compounds</i> , 2020, 843, 156001.	5.5	8
83	Large-scale fabrication of biomass-derived N, S co-doped porous carbon with ultrahigh surface area for oxygen reduction. <i>Materials Chemistry and Physics</i> , 2021, 267, 124601.	4.0	7
84	Radiolysis route to Pt nanodendrites with enhanced comprehensive electrocatalytic performances for methanol oxidation. <i>Catalysis Communications</i> , 2015, 62, 14-18.	3.3	6
85	A bionic strategy for addressing scale-span issues in all-carbon electrocatalytic systems. <i>Electrochimica Acta</i> , 2017, 245, 318-326.	5.2	6
86	N-Doped Graphene Quantum Dots Supported by Carbon Nanotubes Grown on Carbon Clothes for Lithium Storage. <i>Journal of the Electrochemical Society</i> , 2020, 167, 060513.	2.9	6
87	White light emitting diodes based on green graphene quantum dots and red graphene quantum dots. <i>Molecular Crystals and Liquid Crystals</i> , 2022, 733, 46-51.	0.9	6
88	Ultrafast spontaneous emission modulation of graphene quantum dots interacting with Ag nanoparticles in solution. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	5
89	Iron Carbide Nanoparticles Supported by Nitrogen-Doped Carbon Nanosheets for Oxygen Reduction. <i>ACS Applied Nano Materials</i> , 2021, 4, 8360-8367.	5.0	5
90	Rational Design of Ni-Based Electrocatalysts by Modulation of Iron Ions and Carbon Nanotubes for Enhanced Oxygen Evolution Reaction. <i>Advanced Sustainable Systems</i> , 2020, 4, 2000227.	5.3	4

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91	Distribution characteristics and ecological evaluation of chlorobenzene compounds in surface sediment of the Maowei Sea, Guangxi, China. Environmental Monitoring and Assessment, 2019, 191, 309.	2.7	2
92	Valence State Modulation of Chromium in Selective Hydrogen Peroxide Production Electrocatalysts. ACS Applied Energy Materials, 2021, 4, 10114-10123.	5.1	2
93	Photocatalytic Degradation of 4-Bromodiphenyl Ether Using TiO2/MWCNTs Composites. , 2012, , .		1
94	Recent progress in the development of carbon quantum dots for cell imaging. Oxford Open Materials Science, 2020, 1, .	1.8	1
95	High Humidity Stability Carbon-Dot-Based Light-Emitting Diode With Thin-Film Encapsulation. IEEE Transactions on Electron Devices, 2022, 69, 3236-3239.	3.0	1
96	Adsorptive removal of methylene blue by CuO-acid modified sepiolite as effective adsorbent and its regeneration with high-temperature gas stream. Water Science and Technology, 2016, 74, 844-851.	2.5	0